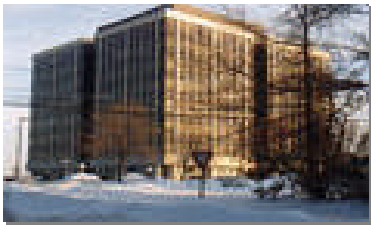
National Environmental Satellite, Data, and Information Service
Homeland Security - Preventing Critical Single Points of Failure

NESDIS Satellite Operations Control Center



NOAA Science Center

Backup Systems will Ensure the Availability of Critical Satellite Data, Products, and Services

The National Requirement: The Nation requires facilities and infrastructure to support environmental satellites in performing daily missions of providing real-time weather, environmental data, and information products. These are key to the prediction and monitoring of weather, climate, and natural and environmental events. Standard information technology and business principles dictate that in the case of a catastrophic failure, a contingency plan for continuing services should exist.

NOAA's Response: The NOAA Satellite Operations Facility houses the Central Environmental Satellite Computer System (CEMSCS) and the Satellite Data Distribution System (SDDS), which ingest, process, distribute, and archive environmental satellite data and information received from NOAA satellites, environmental satellites from several foreign countries, Department of Defense meteorological satellites, and various NASA satellites. This facility represents a critical single point of failure for every operational NOAA satellite product and service that the National Weather Service (NWS) and other users rely on for critical weather information.

The NOAA Satellite Operations Facility is also the single point of entry for all raw satellite data received at the NOAA Science Center, where NOAA generates critical geostationary products and services. Critical polar-orbiting satellite products and services include POES products such as ozone, temperature, and moisture sounder products; and non-NOAA satellite products from NASA, the DoD, Europe, and Japan. Since satellite data represents about 85 percent of the input to numerical weather prediction models, the loss of this information would be catastrophic.

Financing: The FY 2003 budget request includes $2.8 million to provide backup capability for all critical satellite products and services. This effort supports the continuity of critical operational satellite products and services during a catastrophic outage. In FY 2003, NESDIS will begin the first phase of hardware, software, and telecommunications purchases; and perform initial testing of all capabilities for this backup system.

The requested funding also supports installing additional communications links to connect the backup location to the NOAA Science Center. NOAA will procure and install backup equipment at an alternate site, provide telecommunications services to and from the alternate site, and provide support services for system maintenance. Operational backup capabilities for CEMSCS will commence in FY 2003, followed by commencement of the SDDS backup in FY 2004, with full operations and maintenance of the CEMSCS and SDDS backups beginning in FY 2005.